



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,035	08/21/2003	Michael E. Ring	CRD 01482	7356

7590 04/29/2009
JAMES RAY & ASSOCIATES
2640 Pitcairn Road
Monroeville, PA 15146

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
----------	--------------

3657

MAIL DATE	DELIVERY MODE
-----------	---------------

04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,035	Applicant(s) RING ET AL.	
	Examiner Melody M. Burch	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-5 are objected to because of the following informalities:
 - The phrase "such railway car mounted brake assembly" in claim 1;
 - The phrase "such control linkage" in claim 5.

The remaining claims are objected to due to their dependency from claim 1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-13, 16-18, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 10. The phrase "end thereof" in the last line should be reworded to clearly set forth which element the term thereof intends to refer to.

Claim elements "means connected...for securing said actuating member to an actuating linkage of such railway vehicle brake assembly" first recited in claim 1, "guide means directly connected...for guiding and alignment ...bag actuator" in claim 6, "securing means connected...for enabling attachment of said apparatus to a rigid structure" in claim 6, "a second guide means...for guiding...bag actuator" in claim 7, "a means connected...for securing said first substantially vertically...brake assembly" in claim 9, "a guide means connected...for guiding and alignment...bag spring" in claim 9,

Art Unit: 3657

"a securing means connected...for enabling attachment of said air spring actuator assembly to a rigid structure" in claim 9, "means disposed therein for limiting reciprocal motion of said air spring actuator" in claim 11, "means for limiting reciprocal motion of said brake actuator" in claim 12, "means for visual determination of a travel length" in claim 16, "means disposed therein for controlling volume of air in said at least one air bag spring" in claim 18, "guide mean" connected...for guiding" in claim 22, and "securing means connected...for attaching" in claim 22 are means (or step) plus function limitations that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function. Examiner also notes that the means plus function phrases that are modified by such language as "connected to", "directly connected to", "disposed therein", etc. include structure raising issues with respect to the invoking of 112 -6th paragraph. Finally, it is unclear whether the phrase "visual travel determination means" in claim 17 is intended or not to represent means plus function language.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181. The remaining claims are rejected due to their dependency from a rejected claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-7, 9, 11-13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6792704 to Johnson in view of US Patent 6116385 to Ring.

Re: claim 1. Johnson shows in figures 1 and 2 an actuating member capable of being used for a railway vehicle brake assembly, such vehicle brake assembly having an air bag actuator 1 incorporated therein, said actuating member comprising: a first substantially vertically disposed plate like member or one of elements 20, said first substantially vertically disposed plate like having a first substantially planar surface engageable, via intervening elements 18(b), with a first surface of a second substantially vertically disposed plate like member or other of elements 20 attached to such air bag actuator, a substantially horizontally disposed plate like member 18(b) connected to the first substantially vertically disposed plate like member adjacent a

Art Unit: 3657

bottom edge thereof and extending substantially perpendicular to the first planar surface of the first vertically disposed plate member for shielding at least a first portion of the air bag actuator from foreign material as shown, and a means 17 connected to a radially opposed second surface of the first vertically disposed plate like member via intervening elements for securing the actuating member to a control linkage 5 of the assembly.

Johnson is silent with regards to the vehicle brake assembly being a railway vehicle brake assembly.

Ring teaches in figures 1 and 3 the use of a brake assembly being in the form of a railway vehicle brake.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified vehicle brake assembly of Johnson to have been a railway vehicle brake system, as taught by Ring, in order to provide a means of controlling movement between components of a rail vehicle to improve the feel of the ride on the rail vehicle.

Re: claims 2 and 3. Johnson, as modified, shows in figures 1 and 2 of Johnson wherein the actuating member further includes a first plate like member 19 connected to an upper surface of the substantially horizontally disposed member via intervening elements and to the first planar surface of the first substantially vertically disposed plate like member adjacent a first side edge thereof and extending substantially perpendicularly to at least the substantially horizontally disposed member for shielding at least a second portion of such air bag actuator from the detrimental extraneous foreign material and for providing added strength between the first substantially

Art Unit: 3657

vertically disposed member and the substantially horizontally disposed member. With regards to claim 2, the second plate like member is the other element 19 shown behind element 4 in figure 2.

Re: claim 5. Johnson, as modified, shows in figure 1 of Johnson the means 17 including at least one plate member 17 having an aperture formed therethrough shown surrounding element 12 and a pin member 12 disposed in the aperture for securing the at least one plate member to such control linkage.

Re: claim 6. Johnson shows in figures 1 and 3 an apparatus for mounting an air bag actuator to at least one brake beam, the air bag actuator having at least one inflatable air bag spring 3, the apparatus comprising: a first substantially vertically disposed plate like member or one of elements 20 having a planar surface portion for engagement with a substantially planar surface portion of a second substantially vertically disposed plate like member or the other of elements 20 connected to such air bag actuator, the first substantially vertically disposed plate like member exposing at least a first portion of an exterior surface of such at least one inflatable air bag spring to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign when such car mounted brake assembly is in use, a guide means 18(a) directly connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to the planar surface portion of the first substantially vertically disposed plate like member for guiding and alignment during reciprocal motion of such air bag actuator and a securing means 12,17 connected to the first substantially

Art Unit: 3657

vertically disposed plate like member via intervening element such as element 13 for enabling attachment of the apparatus to a rigid structure.

Johnson is silent with regards to the vehicle brake assembly being a railway vehicle brake assembly.

Ring teaches in figures 1 and 3 the use of a brake assembly being in the form of a railway vehicle brake.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified vehicle brake assembly of Johnson to have been a railway vehicle brake system, as taught by Ring, in order to provide a means of controlling movement between components of a rail vehicle to improve the feel of the ride on the rail vehicle.

Re: claim 7. Johnson, as modified, teach in figures 1 and 2 of Johnson, the limitation wherein the apparatus includes a second guide means 18(b), the second guide means directly connected to and disposed closely adjacent a second outer edge of and substantially perpendicular to the planar surface portion of the first substantially vertically disposed plate like member for guiding and alignment during reciprocal motion of the air bag actuator.

Re: claim 9. Johnson shows in figures 1 and 2 an air spring actuator assembly, the air spring actuator assembly comprising: at least one air bag spring 3 having at least a first portion of an exterior surface exposed to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material during use of the air spring actuator assembly, a first substantially vertically disposed plate like

Art Unit: 3657

member or one of elements 20, the first substantially vertically disposed plate like member having a first substantially planar surface engageable with a first surface of a second substantially vertically disposed plate like member or the other of elements 20 attached to the at last one air bag spring, a substantially horizontally disposed plate like member 18(b) connected to the first substantially vertically disposed plate like member adjacent a bottom edge thereof and extending substantially perpendicular to the first substantially planar surface of the first substantially vertically disposed plate like member for shielding the at least said first portion of the exterior surface of the at least one air bag spring from the detrimental extraneous foreign material, a means 4 or elements 19 in front and back of element 4 connected via intervening elements to a radially opposed second surface of the first substantially vertically disposed plate like member for securing the first substantially vertically disposed plate like member to a control linkage 6 of a vehicle brake assembly via intervening elements, a third substantially vertically disposed plate like member or one of elements 17 having a second planar surface portion for engagement with a substantially planar surface portion of a fourth substantially vertically disposed plate like member or other of elements 17 via intervening elements connected to the at least one air bag spring via intervening elements, a guide means 18(a) connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to at least one of the first substantially planar surface and the second planar surface portion of a respective one of the first and the third substantially vertically disposed plate like member for guiding and alignment during reciprocal motion of the air bag spring and a securing means 12

Art Unit: 3657

or 35 connected to the third substantially vertically disposed plate like member for enabling attachment of the air spring actuator assembly to a rigid structure.

Johnson is silent with regards to the vehicle brake assembly being a railway vehicle brake assembly.

Ring teaches in figures 1 and 3 the use of a brake assembly being in the form of a railway vehicle brake.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified vehicle brake assembly of Johnson to have been a railway vehicle brake system, as taught by Ring, in order to provide a means of controlling movement between components of a rail vehicle to improve the feel of the ride on the rail vehicle.

Re: claims 11 and 12. Johnson, as modified, shows in figures 1 and 2 of Johnson the means for limiting reciprocal motion being in the form of a plate shown between the top of air spring 3 and the plate 18(a).

Re: claims 13 and 18. See the air inlet connected to the line on which elements 26 and 27 are located as shown in figure 2 of Johnson. The means for controlling volume of air includes element 26.

6. Claims 1-3, 5-7, 9, 11-13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring and further in view of US Patent 6142480 to Streitman et al.

Johnson, as modified, is not explicit with regards to the operating environment being characterized by a presence of detrimental extraneous foreign material.

Streitman et al. teach in col. 1 the use of a railway vehicle brake being in the environment characterized by a presence of detrimental extraneous foreign material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a surrounding environment characterized by detrimental extraneous foreign material, as taught by Streitman et al., since it is old and well-known in the art that vehicles operate in an environment marked by detrimental extraneous foreign material such as vehicle emissions and other harmful byproducts output from other machines.

7. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring and further in view of US Patent 3768826 to Hickman.

Johnson, as modified, shows the vertically disposed plate member being attached to the horizontal plate member of the air bag actuator, but is silent with regards to the attachment resulting from apertures (through which fasteners pass).

Hickman teaches in figure 15 the use of a vertically disposed plate 105 having at least one aperture (shown corresponding to the apertures on element 119) for enabling attachment to a horizontally disposed plate member 116 by way of fasteners passing through the at least one aperture.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the means for enabling fastening of Johnson, as modified, to have included apertures, as taught by Hickman, in order to provide a

Art Unit: 3657

functionally equivalent means of fastening two components to ensure proper operation of the device and two improve reliability.

8. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring and Hickman and further in view of Streitman et al.

Johnson, as modified, is not explicit with regards to the operating environment being characterized by a presence of detrimental extraneous foreign material.

Streitman et al. teach in col. 1 the use of a railway vehicle brake being in the environment characterized by a presence of detrimental extraneous foreign material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a surrounding environment characterized by detrimental extraneous foreign material, as taught by Streitman et al., since it is old and well-known in the art that vehicles operate in an environment marked by detrimental extraneous foreign material such as vehicle emissions and other harmful byproducts output from other machines.

9. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring and further in view of US Patent 4693486 to Pierce.

Re: claims 10 and 22. See the rejection of claim 9 for claim 22 and Johnson, as modified, shows a pair of elongated members 19, 19 each of the pair of elongated member extending outwardly and substantially perpendicular to the first substantially vertically disposed plate, but is silent with regards to the aperture formed therethrough adjacent to and spaced from a distal end thereof.

Pierce teaches in col. 4 lines 36-39 the use of a member having an aperture formed therethrough.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the members of Johnson, as modified, to have included an aperture formed therethrough, as taught by Pierce, in order to provide a means of reducing the overall weight of the assembly.

10. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring and Streitman as applied above, and further in view of US Patent 4693486 to Pierce.

Johnson, as modified, is not explicit with regards to the operating environment being characterized by a presence of detrimental extraneous foreign material.

Streitman et al. teach in col. 1 the use of a railway vehicle brake being in the environment characterized by a presence of detrimental extraneous foreign material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a surrounding environment characterized by detrimental extraneous foreign material, as taught by Streitman et al., since it is old and well-known in the art that vehicles operate in an environment marked by detrimental extraneous foreign material such as vehicle emissions and other harmful byproducts output from other machines.

11. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ring as applied to claim 9 above, and further in view of US Patent 4846785 to Cassou et al.

Art Unit: 3657

Johnson, as modified, describes the invention substantially as set forth above, but does not include the limitation of a visual travel indicator.

Cassou et al. teach in col. 4 lines 2-5 the limitation of an actuator including a visual travel indicator or markings 20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Johnson, as modified, to have included a visual travel indicator, as taught by Cassou et al., in order to provide a means of monitoring the operation of the air spring actuator to ensure that is inflating and deflating to acceptable levels.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson and Ring in view of Streitman et al. as applied to claim 9 above, and further in view of US Patent 4846785 to Cassou et al.

Johnson, as modified, describes the invention substantially as set forth above, but does not include the limitation of a visual travel indicator.

Cassou et al. teach in col. 4 lines 2-5 the limitation of an actuator including a visual travel indicator or markings 20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Johnson, as modified, to have included a visual travel indicator, as taught by Cassou et al., in order to provide a means of monitoring the operation of the air spring actuator to ensure that is inflating and deflating to acceptable levels.

Art Unit: 3657

13. Claims 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art recited above the “improvement” phrase in claim 19 in view of Johnson.

The admitted prior art recites the railway environment, but the admitted prior art is silent as to the specific detail of the air spring actuator.

Johnson teaches in figures 1 and 2 an air spring actuator 1 comprising: a first substantially vertically disposed plate like member or one of elements 20 having a first substantially planar surface and a means 12 connected to the first substantially vertically disposed plate like member via intervening elements for securing the air spring actuator to such second control linkage 6, a second substantially vertically disposed plate like member or other of elements 20 having a second substantially planar surface and a means 19 connected to the second substantially vertically disposed plate like member for securing the air spring actuator to one of the beam 10, such second force transmitting member and a combination thereof, and at least one inflatable air bag spring 3 having a pair of substantially vertically disposed planar surfaces 17,17 for engagement with and attachment to the first substantially planar surface of the first substantially vertically disposed plate like member and the second substantially planar surface of the second substantially vertically disposed plate like member via intervening elements whereby selective inflation and deflation of the at least one inflatable air bag spring in a longitudinal direction enables a reciprocal motion thereof to move such control linkages and such force transmitting members for actuating and deactuating such brake beams wherein an exterior surface of the at least one inflatable air bag

Art Unit: 3657

spring is at least partially exposed within such brake assembly to an atmosphere when such brake assembly is in use.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the air spring actuator of the admitted prior art to have included an air spring actuator, as taught by Johnson, in order to provide a means of maintaining the spring brake actuator in an exposed state to facilitate monitoring for maintenance purposes and to provide easy accessibility. With regards to claims 20 and 21, see element 18(a) as the means for shielding and guiding and aligning.

14. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art in view of Johnson and further in view of US Patent 6142480 to Streitman et al.

Admitted prior art, as modified, is silent with regards to the operating environment being characterized by a presence of detrimental extraneous foreign material.

Streitman et al. teach in col. 1 the use of a railway vehicle brake being in the environment characterized by a presence of detrimental extraneous foreign material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a surrounding environment characterized by detrimental extraneous foreign material, as taught by Streitman et al., since it is old and well-known in the art that vehicles operate in an environment marked by detrimental extraneous foreign material such as vehicle emissions and other harmful byproducts output from other machines.

Response to Arguments

15. Applicant's arguments filed 1/9/09 have been fully considered but they are not persuasive. Applicant argues that there is no evidence or suggestion in Johnson that his actuator is suitable for use on railway vehicle brake systems because Johnson is in the art of snowplow vehicles. Examiner notes that Johnson's airbag actuator acts in the environment of a vehicle. Since a railway vehicle is a vehicle, there is nothing to suggest that the air bag actuator could not function in another type of vehicle. Applicant goes on to state that the actuator in Johnson is for controlling contact between ground engaging components and the road. Examiner notes that this statement helps to support Examiner's position that the actuator of Johnson is capable of use on a railway vehicle brake system since such ground engaging function accomplished by the actuator of Johnson can, in essence, effectuates a form a braking control since components engaging a road produce a braking effect. Thus, the Johnson reference is reasonably pertinent since it logically would have commended itself to the inventor's attention when considering his invention as a whole due to the fact that it is an air bag in the environment of a vehicle and the air bag is associated with a ground engaging function which could be employed to effectuate a braking action. Applicant also argues that the motivation to combine the references to improve the feel of the ride is improper since the feel of the ride is not an issue in freight cars. Examiner disagrees and notes that the feel of the ride still has relevance in the freight car environment since a smoother ride in freight cars would reduce excessive damage to the products being

Art Unit: 3657

transported in the cars and would also improve the feel of the ride for the train operators. Applicant also argues that no elements in Johnson are connected to the "opposed" surface of element 20; however, Applicant then admits that means 17 is connected with element 20 via 18(a). Examiner agrees that means 17 is connected with element 20 via element 18(a), and Examiner emphasizes that all surfaces of element 20 are connected to means 17 via element 20, as broadly recited. Therefore there is an element connected to the opposed surface of element 20 – means 17. Applicant argues that the inner surface of elements 20 are not connected to the surface of the air bag but element 18(b) does. Examiner notes that elements 20 are, therefore, connected to the surface of the air bag by way of element 18(b) as broadly recited. Finally, Applicant argues that element 20 of Johnson and not its element 18(b) is operable for shielding the exposed exterior surface of the air bag. Examiner disagrees and notes that by being positioned adjacent to the surface of the air bag, element 20 provides some shielding of the air bag the same way that lenses of eyeglasses provide some shielding of the eyes even though the lenses are not attached to the eyes. Accordingly, the rejections have been maintained.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

Art Unit: 3657

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
April 27, 2009

/Melody M. Burch/
Primary Examiner, Art Unit 3657